



Government of India
Department of Electronics and Information Technology
Ministry of Communications and Information Technology

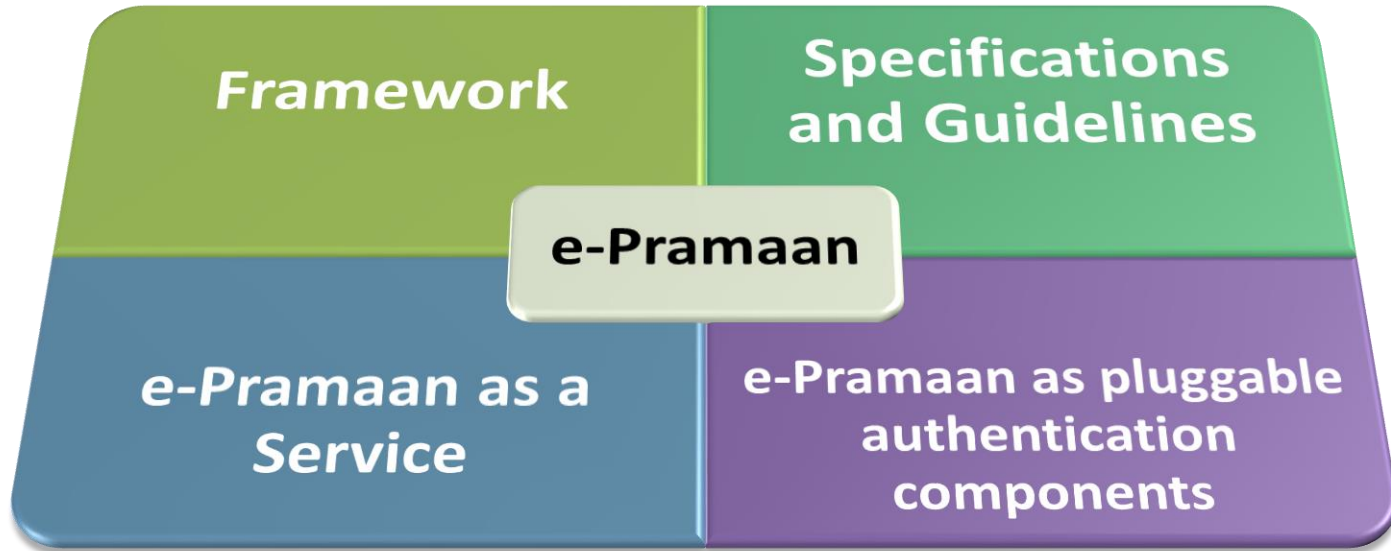
Hindi		English
e-Pramaan	=	e-Authentication



- **Several e-Governance initiatives undertaken across country**
 - Increasing need for e-Authentication of users accessing online services through web/mobile
- **Lack of standard, consistent and robust e-Authentication mechanisms**
 - Inadequate and disparate across various applications
 - Mostly offline methods
 - Lack of uniformity in the authentication methods
 - Different ID proofs needed for accessing similar public services



- 1 • Consistency in government processes for e-Authentication
- 2 • Services are delivered to the authorized recipient
- 3 • To avoid duplication of authentication infrastructure and reduce the cost and efforts
- 4 • Enable Single Sign-on across various government applications
- 5 • Incorporate Aadhaar based authentication in e-Authentication mechanisms
- 6 • Guidelines for determining the authentication assurance levels



e-Pramaan:The Framework

5 Framework | Key Components



Identity
Management



Authentication



Credential
Registration



Single Sign-On



Website
Authentication



Fraud
Management



6 Framework | Authentication Levels

Level 1

Login Id:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Login"/>	

Level 2

Login Id:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Login"/>	



Level 3

Login Id:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Login"/>	



Level 4

Login Id:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Login"/>	



e-Pramaan: Specifications & Guidelines

Incorporates Global Standards in e-Authentication

- IEEE, ISO

Collaborative Process

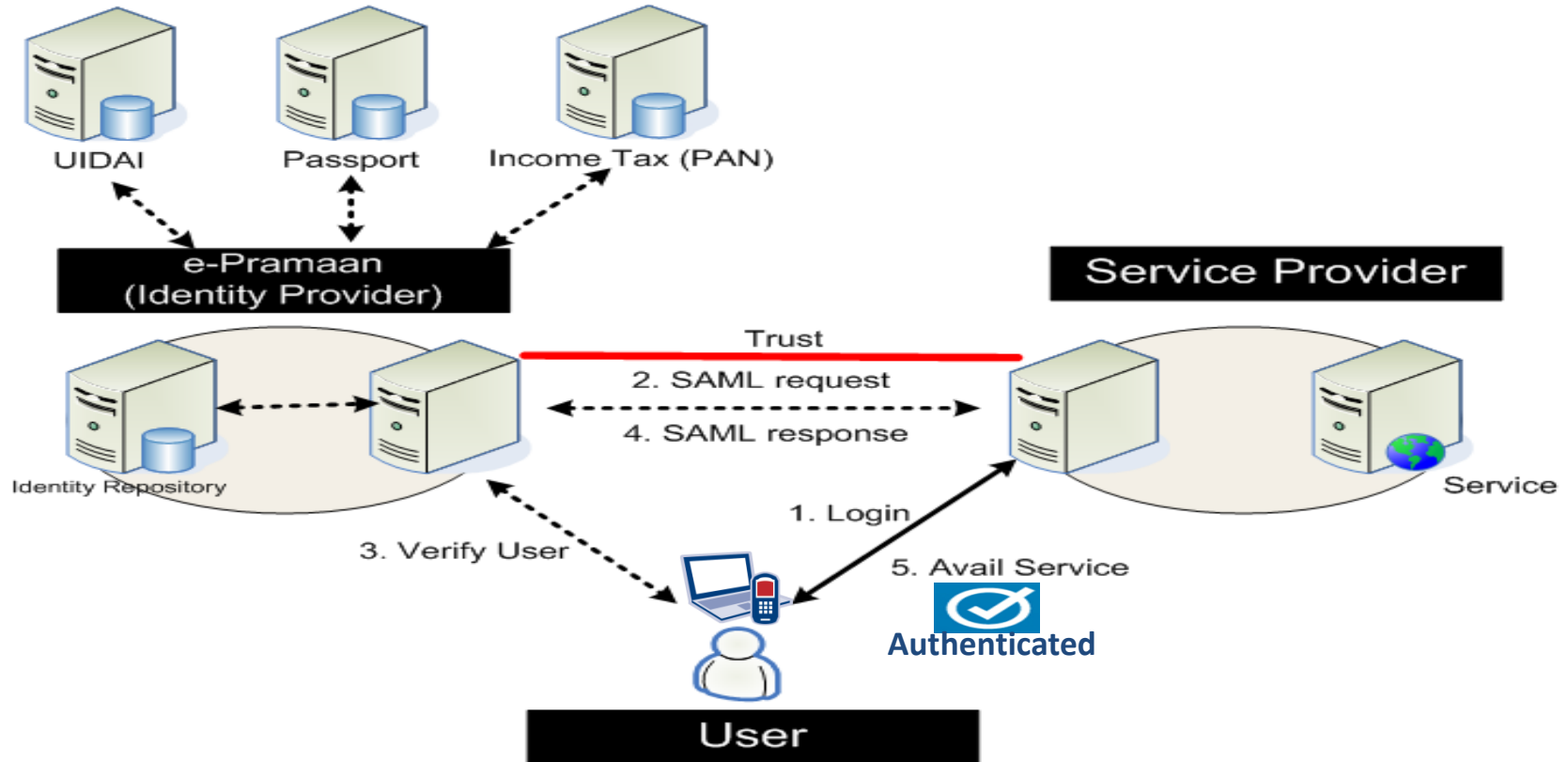
- Developed in consultation with industry and academia
- Public feedback

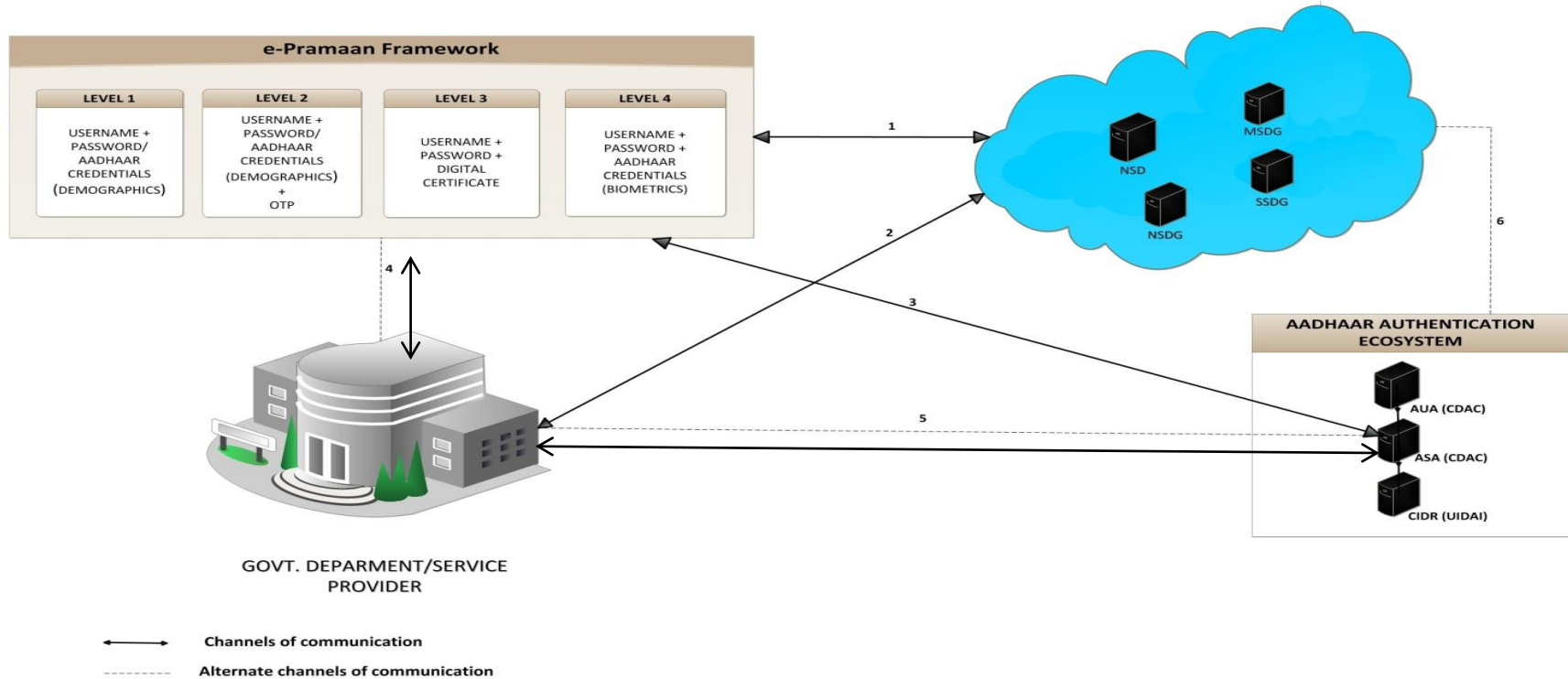
Open

- Based on open standards
- Freedom to Industry develop eAuthentication solutions

HMAC based (HOTP)	RFC 4868
Time based OTP (TOTP)	RFC 6238
SMS/Email based OTP	RFC 2289
PKI/Digital Certificates	X.509 v3 certificate standard, as specified in RFC 5280
Biometrics	IEEE, ISO
Demographics	Demographics Standards issued by Govt. of India
SSO	SAML v2.0
Communication	SSL 3.0/TLS 1.0
Encryption	RSA 2048/ECC/AES

e-Pramaan:The Project





Thank You

www.epramaan.gov.in